

WO 2005/032484 A2

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
14 April 2005 (14.04.2005)

PCT

(10) International Publication Number  
**WO 2005/032484 A2**

(51) International Patent Classification<sup>7</sup>: **A61K**

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:  
**PCT/US2004/032616**

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(22) International Filing Date: 1 October 2004 (01.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/508,634 3 October 2003 (03.10.2003) US

## Declarations under Rule 4.17:

(71) Applicant (*for all designated States except US*): **3M INNOVATIVE PROPERTIES COMPANY [US/US]; 3M Center, Post Office Box 33427, Saint Paul, Minnesota 55133-3427 (US).**

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **LINDSTROM, Kyle, J. [US/US]; Post Office Box 33427, Saint Paul, Minnesota 55133-3427 (US). MERRILL, Bryon, A. [US/US]; Post Office Box 33427, Saint Paul, Minnesota 55133-3427 (US). HARALDSON, Chad, A. [US/US]; Post Office Box 33427, Saint Paul, Minnesota 55133-3427 (US). RICE, Michael, J. [US/US]; Post Office Box 33427, Saint Paul, Minnesota 55133-3427 (US). KSHIRASAGAR, Tushar, A. [IN/US]; Post Office Box 33427, Saint Paul, Minnesota 55133-3427 (US). HEPPNER, Philip, D. [US/US]; Post Office Box 33427, Saint Paul, Minnesota 55133-3427 (US). WURST, Joshua, R. [US/US]; Post Office Box 33427, Saint Paul, Minnesota 55133-3427 (US). NIWAS, Shri [US/US]; Post Office Box 33427, Saint Paul, Minnesota 55133-3427 (US). JOHANNESSEN, Sarah, C. [US/US]; Post Office Box 33427, Saint Paul, Minnesota 55133-3427 (US).**

(74) Agents: **ERSFELD, Dean, A. et al.; Office of Intellectual Property Counsel, Post Office Box 33427, Saint Paul, Minnesota 55133-3427 (US).**

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM,

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations*

## Published:

— *without international search report and to be republished upon receipt of that report*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: **ALKOXY SUBSTITUTED IMIDAZOQUINOLINES**

(57) Abstract: Imidazoquinoline compounds with an alkoxy substituent at the 6, 7, 8, or 9-position, pharmaceutical compositions containing the compounds, intermediates, methods of making, and methods of use of these compounds as immunomodulators, for inducing or inhibiting cytokine biosynthesis in animals and in the treatment of diseases including viral, and neoplastic, are disclosed.